

REMARKS

Claims 1 and 4-21 are pending in the application. Claims 31-40 were withdrawn from consideration. Reconsideration of the application is respectfully requested in view of the comments below.

I. REJECTION OF CLAIMS 1, 4-5, 14-16 AND 19-20 UNDER 35 U.S.C. §103(a)

Claims 1, 4-5, 14-16 and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of U.S. Pub. No. 2002/0006119 (Steudle). Withdrawal of the rejection is respectfully requested for at least the following reasons.

i. The combination of AAPA and Steudle fails to disclose a puncturing device configured to output a data stream that indicates a position of empty locations in the output data stream, as recited in claim 1.

Claim 1 is directed to an electronic transmitter device that comprises a puncturing device that is configured to provide empty locations in the output data stream. *The puncturing device is further configured to output a signal that indicates a position of the empty locations in the output data stream.* As conceded in the Office Action, AAPA fails to teach this feature (see O.A., 1/9/09, p. 3, paragraph 3), however, it is asserted in the Office Action that based on the teaching of Steudle, one of ordinary skill in the art would be motivated to modify AAPA in accordance with the claimed invention.

More particularly, in referencing the Steudle reference, the Office Action states:

Furthermore, Steudle teaches that *the puncturing device determines the location of the empty location (gaps)* and punctures said empty locations in to the output data stream, *wherein the empty locations are not transmitted* (abstract and paragraphs 7 and 8). One of ordinary skill in the art at the time of the invention would clearly recognize that it would be obvious for the puncturing device to provide

a signal indicating the position of empty gaps in order to prevent the transmission of the empty location. (See O.A., 1/9/09, p.4, second full paragraph) (Emphasis added).

As will be shown below, the above assertion is incorrect on two different, independent bases: (1) Steudle's puncturing device does not determine the position of the empty location in an output data stream, and (2) even if Steudle's puncturing device did determine empty locations, such teaching would not motivate one of ordinary skill in the art to output a signal that indicates the empty location positions as claimed. Each point will be addressed separately below.

a. *Steudle does not disclose a puncturing device that determines the position of empty locations in an output data stream.*

Steudle discloses a telecommunications system that includes a base station and at least one wireless terminal. As disclosed in paragraph [0011] of Steudle, measurement pattern parameters (that determine a manner of generating a measurement gap in a packet frame) are defined and transmitted to the wireless terminal ***via the base station.*** As further discussed in paragraph [0012] ***the wireless terminal receives the measurement pattern parameters,*** and then arranges (via a processor) gaps into a time-slot frame *via* a puncturing function. This functionality is again confirmed in paragraph [0013] of Steudle, wherein it unambiguously states that the measurement pattern parameters are defined operationally at the base station, and then transmitted to the wireless terminals. This functionality is still further confirmed in paragraph [0062] of Steudle, wherein the base station transmitter 400 transmits parameters to a wireless terminal receiver 420, which then uses a processor 430 to arrange the gaps into the time-slot frame according to the parameters. Clearly then, ***in Steudle the puncturing device resides in the wireless terminal, but such puncturing device does not determine the position of empty locations. Instead, such empty location positions are dictated by the measurement pattern parameters that are defined at the base station*** and then transmitted to the wireless

terminal that contains the puncturing device. Consequently, assertion (1) made in the Office Action that Steudle teaches a puncturing device that determines the position of empty locations is incorrect, and thus any resultant conclusion as to the motivation of one of ordinary skill in the art to modify AAPA according to the claimed invention is also incorrect. Accordingly, claim 1 is non-obvious over the cited prior art, and withdrawal of the rejection is respectfully requested.

- b. Even if Steudle did teach a puncturing device that determines the position of empty locations in an output data stream (which it does not), such teaching does not motivate one of ordinary skill in the art to provide a signal that indicates empty location positions, as recited in claim 1.*

To briefly recount assertion (2) made in the Office Action, it was contended that one of ordinary skill in the art at the time of the invention would clearly recognize that it would be obvious for the puncturing device to provide a signal indicating the position of empty gaps *in order to prevent the transmission of the empty location*. As will be more fully appreciated below, the teaching of Steudle does not motivate one of skill in the art to provide a signal indicating the position of empty gaps because *Steudle does not advocate preventing transmissions having empty locations*.

Steudle teaches in paragraph [0007] that parameters measurements are employed to interrupt a transmission by generating a gap in a data frame. Paragraph [0008] of Steudle further discusses various ways of inserting gaps into a data transmission in a compressed mode of operation. *As clearly stated in Steudle, the insertion of such gaps is intentional, and is employed to force gaps in the data to be transmitted.* Therefore the rationale proffered in the Office Action that providing a signal to indicate empty location positions would be obvious to *prevent transmission of the empty locations (gaps)* makes no sense because Steudle discloses transmitting data having empty locations in the data frames. Clearly then, one of ordinary skill in the art would not be motivated to modify AAPA to include a signal that indicates empty location positions based on the teaching of Steudle. Therefore the

assertion (2) set forth in the Office Action is incorrect, and thus claim 1 is non-obvious over the cited prior art for at least this additional reason.

ii. One of ordinary skill in the art would not have been motivated to modify the puncturing device of AAPA with Steudle because such a modification would render the invention of Steudle inoperable.

Prior art references may be combined together when there is a motivation or suggestion to do so. Such motivation may be found in the references themselves, in the nature of the problem to be solved, or in the knowledge of persons of ordinary skill in the art. MPEP § 2143.01 (*citing In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998)). Further, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP § 2143.01 (V)(*citing In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984)).

It is respectfully submitted that the requisite motivation to modify AAPA in accordance with Steudle does not exist because doing so would frustrate the intended purpose of AAPA by making it inoperable.

Steudle teaches methods for generating measurement gaps performed in a compressed mode, in which the required measurement gap comprises time-slots of two consecutive time-slot frames. The measurement gaps in different time-slot frames are generated with different gap generation methods, such as by puncturing data being transmitted, halving the spreading factor, or buffering the data transmitted (see, paragraph [0014]). However, Steudle states that it is not always possible to implement maximum puncturing in a compressed mode of operation, and so other measurement gaps in consecutive time-slots are generated by different methods. For example, because puncturing is also used to adapt data rates in an ordinary transmission, as with the case in AAPA, it is impossible to generate a gap advantageous for measurements of a measurement gap. Additionally, according to Steudle, “[w]hen using the puncturing

method . . . maximum puncturing is not always possible in compressed mode, due to a possible data rate adaption (paragraph [0009]).” The device of AAPA is selecting a coding rate in accordance with IEEE standard, ETSI standard, etc. ***in order to define a certain data rate adaption.*** Consequently, the puncturing device of AAPA would render the method of defining measurement gaps for making measurements inoperable as taught by Steudle, and thus one of ordinary skill in the art would not have been motivated to modify the puncturing device of AAPA with the method of Steudle. Withdrawal of the rejection is therefore respectfully requested for at least this additional reason.

Claims 4-21 depend upon claim 1 and add further limitations thereto. As highlighted above, AAPA in view of Steudle in view of Schramm does not teach or suggest the invention of claim 1. Accordingly, withdrawal of the rejection of claims 4-21 is respectfully requested.

II. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, LLP134WOUS.

Respectfully submitted,
ESCHWEILER & ASSOCIATES, LLC

By /Thomas G. Eschweiler/
Thomas G. Eschweiler
Reg. No. 36,981

National City Bank Building
629 Euclid Avenue, Suite 1000
Cleveland, Ohio 44114
(216) 502-0600